

AMENDMENTS TO THE CLAIMS

1. (Original) A system for measuring a pseudo pixel error rate in digital data transmission using a data enable (DE) signal, comprising:
 - a de-glitch filter for filtering a glitch from an unfiltered DE signal to generate a filtered DE signal after a predetermined processing time;
 - a delay unit for delaying the unfiltered DE signal to match the processing time of the de-glitch filter; and
 - a comparator for comparing the filtered DE signal and the unfiltered DE signal to detect an occurrence of error.
2. (Original) The system of claim 1, wherein the comparator is an XOR circuit.
3. (Original) The system of claim 1, further comprising a counter for counting the errors to determine the pseudo pixel error rate.
4. (Original) The system of claim 1, wherein the de-glitch filter comprises:
 - a shift register for sampling the unfiltered DE signal to generate sampled input bits;
 - a first combining circuit for generating signals when all the sampled inputs bits are high;
 - a plurality of inverters for generating inversion of the sampled input bits;
 - a second combining means for generating signals when all the inverted, sampled inputs are high; and

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an SR-latch connected to the outputs of the first and second combining means to produce the filtered DE signal.

5. (Original) The system of claim 1, wherein the de-glitch filter comprises:

an AND circuit for combining DE signals from all channels to produce logical AND's of the DE signals as an output; and

a comparator for comparing the output with the unfiltered DE signal to generate a filtered DE signal.

6. (Original) The system of claim 5, wherein the comparator is an XOR circuit.

7. (Original) The system of claim 1, wherein the digital data transmission complies with the DVI specification.

8. (Original) A system for measuring a pseudo pixel error rate in digital data transmission using a data enable (DE) signal, comprising:

a de-glitch filter for filtering a glitch from an unfiltered (DE) signal to generate a filtered DE signal;

a comparator for comparing the filtered DE signal and the unfiltered DE signal to detect an occurrence of error and;

a counter for countering the errors to determine the pseudo pixel error rate.

9. (Original) The system of claim 8, wherein the digital data transmission complies with the DVI specification.

10. (Currently amended) A system for measuring a pseudo pixel error rate in digital data transmission, comprising;

- a receiver for receiving an encoded signal containing video;
- a decoder for decoding the received signal to produce a decoded signal after a first processing time;
- an encoder for re-encoding the decoded signal back to a re-encoded signal after a second processing time;
- a delay for delaying the received signal to match the sum of the first and second processing time; and
- a comparator for comparing the re-encoded signal and the received signal to detect an occurrence of error[[:]], wherein the comparing is performed using a low data enable signal.

11. (Original) The system of claim 10, wherein the encoded signal is encoded using TMDS.

12. (Original) The system of claim 10, further comprising a counter for countering the errors to determine a pseudo pixel error rate.

13. (Currently amended) A system for measuring a pseudo pixel error rate in digital transmission using data encoding, comprising;

- a decoder for decoding received encoded signal to produce a decoded signal;
- an encoder for re-encoding the decoded signal back to the re-encoded signal;
- a comparator for comparing the re-encoded signal and the received signal to detect an occurrence of error, wherein the comparing is performed using a low data enable signal;

and

a counter for counting the errors to determine the pseudo pixel error rate.

14. (Original) The system of claim 13, wherein the data encoding uses TMDS.

15. (Currently amended) A system for measuring a pseudo error rate in digital data transmission using data encoding, comprising:

a decoder for decoding a received encoded signal to produce a decoded signal;

an encoder for re-encoding the decoded signal back to a re-encoded signal;

a comparator for comparing the re-encoded signal and the received signal to detect an occurrence of error, wherein the comparing is performed using a low data enable signal;

and

a counter for counting the errors to determine the pseudo error rate.

16. (Original) A method for measuring a pseudo pixel error rate in digital data transmission using a data enable (DE) signal, comprising the steps of:

filtering a glitch from an unfiltered DE signal to generate a filtered DE signal after a predetermined processing time;

delaying the unfiltered DE signal to match the processing time of the de-glitch filter; and

comparing the filtered DE signal and the unfiltered DE signal to detect an occurrence of error.

17. (Original) The method of claim 16, wherein the comparing step performs an XOR operation.

18. (Original) The method of claim 16, further comprising the step of counting the errors to determine the pseudo pixel error rate.
19. (Original) The system of claim 16, wherein the step of filtering comprises steps of:
sampling the unfiltered DE signal to generate sampled inputs bits;
generating a first signal when all the sampled inputs bits are high;
inverting the sampled input bits;
generating a second signal when all the inverted, sampled inputs are high; and
latching by setting an output when the first signal is asserted and reset when the second signal is asserted.
20. (Original) The method of claim 16, wherein the step of filtering comprises the steps of:
combining DE signals from all channels to produce logical AND's of the DE signals as an output; and
comparing the output with the unfiltered DE signal to generate a filtered DE signal.
21. (Original) The method of claim 20, wherein the step of comparing performs a OXR operation.
22. (Original) The method of claim 16, wherein the digital data transmission complies with the DVI specification.
23. (Original) A method of measuring a pseudo pixel error rate in digital data transmission using a data enable (DE) signal, comprising the steps of:

filtering a glitch from an unfiltered (DE) signal to generate a filtered DE signal;
comparing the filtered DE signal and the unfiltered DE signal to detect an
occurrence of error and
counting the errors to determine the pseudo pixel error rate.

24. (Original) The method of claim 23, wherein the digital data transmission complies with the DVI specification.

25. (Currently amended) A method of measuring a pseudo pixel error rate in digital data transmission, comprising the steps of:

receiving an encoded signal containing video;

decoding the received signal to produce a decoded signal after a first processing
time;

re-encoding the decoded signal back to a re-encoded signal after a second
processing time;

delaying the received signal to match the sum of the first and second processing
time;

comparing the re-encoded signal and the received signal to detect an occurrence
of error[[:]] wherein the comparing is performed using a low data enable signal.

26. (Original) The method of claim 25, wherein the encoded signal is encoded using TMDS.

27. (Currently amended) The method of [[C]]claim 25, further comprising a counter for
counting the errors to determine a pseudo pixel error rate.

28. (Currently amended) A method of measuring a pseudo pixel error rate in digital data transmission using data encoding, comprising:

- a decoder for decoding a received encoded signal to produce a decoded signal;
- an encoder for re-encoding the decoded signal back to re-encoded signal;
- a comparator for comparing the re-encoded signal and the received signal to detect an occurrence of error, wherein the comparing is performed using a low data enable signal;

and

- a counter for counting the errors to determine the pseudo pixel error rate.

29. (Original) The method of claim 28, wherein the data encoding uses TMDS.

30. (Currently amended) A method of measuring a pseudo error rate in digital data transmission using data encoding, comprising the steps of:

- receiving a signal containing an encoded character;
- comparing encoded character with a set of predefined in-band characters, wherein the comparing is performed using a low data enable signal;
- detecting an error if the encoded character is not the same as any characters in the set; and
- counting the errors to determine the pseudo error rate.

31. (Original) The method of claim 30, wherein the data encoding uses TMDS.

32. (Currently amended) A method of measuring a pseudo error rate in digital data transmission using data encoding, comprising the steps of:

- receiving a signal containing an encoded character;

comparing the encoded character with a set of predefined out-of-band (OOB) characters, wherein the comparing is performed using a low data enable signal;
detecting an error if the encoded character is the same as one of the OOB characters in the set; and
counting the errors to determine the pseudo error rate.

33. (Original) The method of claim 32, wherein the data encoding uses TMDS.

34. (Currently amended) A method of measuring the pseudo error rate in digital data transmission using data encoding, comprising the steps of:

decoding a received encoded signal to produce a decoded signal;
re-encoding the decoded signal back to a re-encoded signal;
comparing the re-encoded signal and the received signal to detect an occurrence of error, wherein the comparing is performed using a low data enable signal; and
counting the errors to determine the pseudo error rate.

35. (Currently amended) A system for utilizing a pseudo pixel error rate in a receiver with adjustable parameters for use in digital data transmission, comprising the steps of:

a detector for detecting pseudo pixel errors, wherein the detecting is performed using a low data enable signal;
a counter for determining a pseudo pixel error rate; and
a controller for adjusting the receiver parameters to reduce the pseudo pixel error rate.

36. (Currently amended) The system of claim 35, wherein the receiver parameters include[[s]] a receiver termination resistance.

37. (Currently amended) The system of claim 35, wherein the receiver parameters include[[s]] a receiver equalization scheme.

38. (Currently amended) The system of claim 35, wherein the receiver parameters include[[s]] a receiver clocking scheme.

39. (Currently amended) The system of claim 35, wherein the receiver parameters include[[s]] a receiver bandwidth.

40. (Currently amended) The system of claim 35, wherein the receiver parameters include[[s]] a receiver sampling method.

41. (Currently amended) A method of utilizing a pseudo pixel error rate in a receiver with adjustable parameters for use in digital data transmission, comprising the steps of:

detecting pseudo pixel errors, wherein the detecting is performed using a low data enable signal;

determining a pseudo pixel error rate; and

controlling the receiver parameters to reduce the pseudo pixel error rate.

42. (Currently amended) The method of claim 41, wherein the receiver parameters include[[s]] a receiver termination resistance.

43. (Currently amended) The method of claim 41, wherein the receiver parameters include[[s]] a receiver equalization scheme.
44. (Currently amended) The method of claim 41, wherein the receiver parameters include[[s]] a receiver clocking scheme.
45. (Currently amended) The method of claim 41, wherein the receiver parameters include[[s]] a receiver bandwidth.
46. (Currently amended) The method of claim 41, wherein the receiver parameters include[[s]] a receiver sampling method.

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